Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 1-11.

12. (New) A method for producing a single crystal of which a whole plane in a radial direction is a defect-free region with pulling the single crystal from a raw material melt in a chamber by Czochralski method, wherein a pulling condition is changed in a direction of the crystal growth axis during pulling the single crystal so that a margin of a pulling rate that the single crystal of which the whole plane in a radial direction is a defect-free region can be pulled is always a predetermined value or more.

13. (New) The method for producing a single crystal according to Claim 12, wherein the pulling condition is changed so that the margin of the pulling rate always satisfies a relational formula "the margin of the pulling rate $\geqq$ 0.35 x exp(-0.016 x a diameter of a straight body of the single crystal [mm]) + 0.01".

14. (New) The method for producing a single crystal according to Claim 12, wherein the pulling condition to be changed is at least any one of a distance (L1) between a melt surface of the raw material melt and a heat insulating member provided in the chamber, a position of a heater heating the raw material melt, and a flow rate (F) of an inert-gas introduced into the chamber.

15. (New) The method for producing a single crystal according to Claim 13, wherein the pulling condition to be changed is at least any one of a distance (L1) between a melt surface of the raw material melt and a heat insulating member provided in the chamber, a position of a heater heating the raw material melt, and a flow rate (F) of an inert-gas introduced into the chamber.

16. (New) The method for producing a single crystal according to Claim 14, wherein at least any one of the distance L1 between the surface of the raw material melt and the heat insulating member, the position of the heater, and the flow rate F of the inert-gas is changed so that a relation expressed with a function of a solidification ratio S of the single crystal is satisfied.

17. (New) The method for producing a single crystal according to Claim 15, wherein at least any one of the distance L1 between the surface of the raw material melt and the heat insulating member, the position of the heater, and the flow rate F of the inert-gas is changed so that a relation expressed with a function of a solidification ratio S of the single crystal is satisfied.

18. (New) The method for producing a single crystal according to Claim 16, wherein the distance L1 between the surface of the raw material melt and the heat insulating member is changed so that the distance L1 between the surface of the raw material melt and the heat insulating member satisfies a relation of $L1 = a \times S + b$ (a and b are constant) with the solidification ratio S of the single crystal.

19. (New) The method for producing a single crystal according to Claim 17, wherein the distance L1 between the surface of the raw material melt and the heat insulating member is changed so that the distance L1 between the surface of the raw material melt and the heat insulating member satisfies a relation of $L1 = a \times S + b$ (a and b are constant) with the solidification ratio S of the single crystal.

20. (New) The method for producing a single crystal according to Claim 16, wherein the position of the heater is changed so that a relative distance L2 between a heating center of the heater and the surface of the raw material melt satisfies a relation of $L2 = c \times S + d$ (c and d are constant) with the solidification ratio S of the single crystal.

21. (New) The method for producing a single crystal according to Claim 17, wherein the position of the heater is changed so that a relative distance L2 between a heating center of the heater and the surface of the raw material melt satisfies a relation of $L2 = c \times S + d$ (c and d are constant) with the solidification ratio S of the single

crystal.

22. (New) The method for producing a single crystal according to Claim 16, wherein the flow rate F of the inert-gas is changed so that the flow rate F of the inert-gas satisfies a relation of $F = e \times S + f$ (e and f are constant) with the solidification ratio S of the single crystal.

23. (New) The method for producing a single crystal according to Claim 17, wherein the flow rate F of the inert-gas is changed so that the flow rate F of the inert-gas satisfies a relation of $F = e \times S + f$ (e and f are constant) with the solidification ratio S of the single crystal.

24. (New) The method of producing a single crystal according to Claim 12, wherein a silicon single crystal is pulled as the single crystal.

25. (New) The method of producing a single crystal according to Claim 13, wherein a silicon single crystal is pulled as the single crystal.

26. (New) The method of producing a single crystal according to Claim 12, wherein a single crystal with a diameter of 200mm or more is pulled as the single crystal.

27. (New) The method of producing a single crystal according to Claim 13, wherein a single crystal with a diameter of 200mm or more is pulled as the single crystal.

28. (New) The method of producing a single crystal according to Claim 12, wherein at least a magnetic field of 3000 G or more is applied to the raw material melt when the single crystal is grown.

29. (New) The method of producing a single crystal according to Claim 13, wherein at least a magnetic field of 3000 G or more is applied to the raw material melt when the single crystal is grown.

30. (New) A single crystal produced by the method of producing a single crystal according to Claim 12.

31. (New) A single crystal produced by the method of producing a single crystal according to Claim 13.